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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,294	06/07/2001	Stefan Fietkau	31512-172404 RK	4659

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EXAMINER

TRAN, LOUIS B

ART UNIT	PAPER NUMBER
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3721

15

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/875,294

Applicant(s)

FIETKAU, STEFAN

Examiner

Louis B Tran

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-8, 10-12, 14-18, 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-8, 10-12, 14-18, 24 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3721

DETAILED ACTION

This action is in response to applicant's amendment, Paper No. 14, received on 12/31/2003. Applicant's cancellation of claims 1-3 and 9 in paper no. 13 and 19-23 in Paper No. 14 is acknowledged.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 24, 25, 4-8, 10-12, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greve (3,974,007) in view of Ramspeck et al. (5,194,115).

Greve discloses the invention substantially as claimed including a method of applying a flowable substance to a web of wrapping material for rod shaped products and confining the web 46 to movement along a predetermined path and directing on stream of flowable substance toward one side of the web as described in column 5, lines 35-40 (as in claim 25), advancing the web lengthwise along said path at a variable speed as in .

Greve does not explicitly show method of directing at least one stream of flowable substance in an at least partially non-linear manner toward one side of the web to vary the direction of propagation of the flowable substance.

However, with respect to claim 25, Ramspeck et al. teaches the method of directing at least one stream of flowable substance 56 in an at least partially non-linear

Art Unit: 3721

manner toward one side of the web to vary the direction of propagation of the flowable substance as seen in Figure 1 of Ramspeck et al., wherein said directing step includes the utilization of a nozzle 14 having an orifice 45 which discharges the at least one stream of flowable substance, and includes rotating the stream, wherein said rotating step includes directing against the stream at least one flow of fluid substance for the purpose of generating consistent adhesive loops and spirals in bonding applications.

Therefore, it would have been obvious to one having ordinary skill in the art to simply incorporate the adhesive application of system of Ramspeck et al. into the rod shape making process of Greve in order to achieve improved adhesive consistency in the adhesive application step of Greve..

With respect to claim 24, Ramspeck et al. teaches wherein said flow directing step includes causing the fluid substance to flow along a pre-selected path prior to and during issuance of the stream from the orifice of the nozzle.

With respect to claim 4, Ramspeck et al. teaches wherein the fluid substance is air.

With respect to claim 5, Ramspeck et al. teaches wherein said stream directing step includes imparting to the stream the shape of a hollow cone having an apex in line with the orifice of the nozzle as seen in Figure 3.

With respect to claim 6, Ramspeck et al. teaches wherein the flow directing step includes causing the flow to impinge upon the stream at an acute angle as seen in Figure 3.

Art Unit: 3721

With respect to claim 7, Ramspeck et al. teaches wherein said angle is approximate 30 degrees as in column 4, line 35.

With respect to claim 8, Ramspeck et al. teaches wherein said flow is substantially tangential to said cone as in Figure 2 and in column 4, line 58.

With respect to claim 10, Ramspeck et al. teaches where the step of pumping the flowable substance from a source to the orifice of the nozzle at variable pressure and providing an open and shut closure 23 for the orifice.

With respect to claim 11, Ramspeck et al. teaches wherein said pumping step includes raising the pressure of the flowable substance to a predetermined value prior to opening of the orifice as inherent in the system.

With respect to claim 17 Ramspeck et al. teaches wherein the non linear layer is a spiral layer seen in Figure 1.

With respect to claim 18 Ramspeck et al. teaches wherein the flowable substance is an adhesive.

With respect to claim 12, the modified method of Greve discloses the invention except for explicitly stating that the opening of the orifice takes place approximately .5 seconds subsequent to the raising of the pressure. It would have been obvious to one having ordinary skill in the art at the time the invention was made to the open the orifice takes place approximately .5 seconds subsequent to raising of the pressure of flowable substance to said predetermined value, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Art Unit: 3721

3. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greve (3,974,007) in view of Ramspeck et al. (5,194,115) in further view of Hall (4,987,854).

The modified method of Greve shows the invention substantially as claimed including the above description but does not explicitly show discharging the flowable substance from the orifice at a rate which is a function of the speed of advancement of the web along said predetermined path (as in claim 14) said step of discharging the flowable substance includes varying the rate of discharge of flowable substance proportionally with variations of speed of the web (as in claim 15), wherein said step of discharging the flowable substance includes discharging the flowable substance from the orifice at a rate of at least 2 gram per minute (as in claim 16).

However, Hall teaches the well known method of discharging the flowable substance from the orifice at a rate which is a function of the speed of advancement of the web along said predetermined path described in column 2, lines 1-18 (as in claim 14).

Also with respect to claim 15, said step of discharging the flowable substance includes varying the rate of discharge of flowable substance proportionally with variations of speed of the web as in column 2, lines 1-18, for the purpose of consistent distribution of fluid as in column 1, lines 15-25. Hall states that it is well known in the art to vary flow rates with work piece speeds.

Art Unit: 3721

Therefore, it would have been obvious to one having ordinary skill in the art to provide the modified method of Greve with the well-known concept of adjusting flow rate relative to work piece speeds.

With respect to claim 16, the above references disclose the claimed invention except for explicitly showing wherein said step of discharging the flowable substance includes discharging the flowable substance from the orifice at a rate of at least 2 grams per minute (as in claim 16). It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a flow range of at least 2 grams per minute, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
5. Applicant's remarks have been fully considered but are deemed non-persuasive. Applicant contends that the web 46 in Greve is not advanced at a variable speed. Applicant admits in the remarks of paper no. 14 that Greve discloses variable-speed drive for drums 11 and 12 to subject the filaments of the tow to increased or decreased stretching action but contends there is no variable speed advancing of the web.

As discussed in the previous office action of paper no. 12, claims are given their broadest reasonable interpretation.

var·i·a·ble (vâr'ê-e-bel, vâr'-) *adjective*
Abbr. var.

1. a. Likely to change or vary; subject to variation; changeable.¹

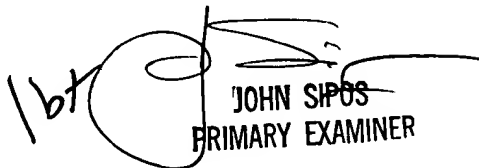
Clearly, the variable speed drive drums of Greve act to stretch the web thereby subjecting the speed of the tow to be varied, or changing, with respect to an arbitrary point.

For the reason's above, the grounds of rejection are deemed proper.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis B Tran whose telephone number is 703-305-0611. The examiner can normally be reached on 8AM-6PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JOHN SIPOS
PRIMARY EXAMINER

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